

Amendment under 37 CFR §1.111
Application No. 10/583,660
Attorney Docket No. 062668

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

Listing of Claims

Claim 1 (Currently amended): A substrate inspection apparatus for inspecting a formation state of a pattern area formed on a substrate, the substrate inspection apparatus comprising:

an inside area inspection data generation means for generating a first inspection data of an ~~in the inside area and outside~~ of a pattern area to be inspected, the inside area data generation means performing a reduction processing of the inside area to generate the first inspection data,

an outside area data generation means for generating a second inspection data of an outside area of the pattern area, the outside area surrounding the inside area, the outside area data generation means performing an expansion processing of the outside area to generate the second inspection data; [[and]]

[[a]] an inside determination means for determining whether the pattern area is defective or not defective by comparing the first inspection data of the inside of the pattern area generated by the inspection data generation means with predetermined inside reference inspection data; and

an outside determination means for determining whether the pattern area is defective by comparing the second inspection data of the outside with predetermined outside reference inspection data.

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Claim 2 (Currently amended): The substrate inspection apparatus according to Claim 1, wherein ~~the type of the~~ first inspection data ~~of the inside of the pattern area~~ differs from ~~the type of the~~ second inspection data ~~of the outside~~.

Claim 3 (Currently amended): The substrate inspection apparatus according to Claim 1, wherein the first inspection data ~~of the inside of the pattern area~~ is data about luminance and the second inspection data ~~of the outside~~ is data about shapes.

Claim 4 (New): The substrate inspection apparatus according to Claim 1, wherein a stricter inspection reference is applied to the outside area than to the inside area.

Claim 5 (New): The substrate inspection apparatus according to Claim 1, wherein the outside area data generation means generates the second inspection data based on luminance in a normal direction of the pattern area.

Claim 6 (New): The substrate inspection apparatus according to Claim 1, wherein the outside area data generation means detects inflection points in a position-luminance graph as the second inspection data, and wherein the outside determination means determines whether the pattern area is defective by comparing the second inspection data with predetermined outside reference inspection data.